Valued Vendor

US Embassy Cairo would like to get a price quotation with the minimum delivery time for the following or equal Products(s):

<u>QTY</u>	<u>COMMODITY</u>
1	AHU-8
	Total Heat-Transfer Rate: 145 MBtu/h
	Airflow: 4326 cfm.
	C/W Electrical heating coil and vibration isolators as per attached specification

Product to be delivered @ our below address (Please specify inland freight costs / If any) and payment will be done according to the Dept of State regulations via Government Purchase Order (Net30 Terms).

EGYPT Delivery Address

US Embassy Cairo Warehouse Behind Maadi Water Company Zahraa El Maadi - Maadi, Cairo - Egypt Attn: Sherif Mohamed

According to the updated regulation of the US Government related to the NDAA policy, we need to have a confirmation from all vendors concerning the NDAA compliance in order to continue doing business with them. Therefore, please confirm by signing and stamping the attached document that you do NOT provide, or use prohibited (covered) telecom equipment or service related to any business with the US Government.

The definition of Covered or Prohibited technologies are telecommunications equipment or services includes all telecommunications equipment or services produced and provided by Huawei Technologies Company or ZTE Corporation, and video surveillance and telecommunications equipment or services produced and provided by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company, or any subsidiaries or affiliates of the five entities. Please see FAR 4.2101 for a complete definition.

Let me know if you have any questions and waiting <u>to have your confirmation ASAP</u> in order to continue our business relationship.

Please be informed that you must, at time of award, have a VALID <u>SAM</u> Account.

Offer Deadline: December 08, 2021 @ 1400 hrs

Thank you and please submit your offer to cairocontracts@state.gov as per each due date beside each RFQ. No offers will be accepted after the due date specified.

Respectfully Yours, GSO/PROC American Embassy, Cairo

SECTION 230513 - COMMON MOTOR REQUIREMENTS FOR HVAC EQUIPMENT

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes general requirements for single-phase and polyphase, general-purpose, horizontal, small and medium, squirrel-cage induction motors for use on ac power systems up to 600 V and installed at equipment manufacturer's factory or shipped separately by equipment manufacturer for field installation.

1.2 COORDINATION

- A. Coordinate features of motors, installed units, and accessory devices to be compatible with the following:
 - 1. Motor controllers.
 - 2. Torque, speed, and horsepower requirements of the load.
 - 3. Ratings and characteristics of supply circuit and required control sequence.
 - 4. Ambient and environmental conditions of installation location.

PART 2 - PRODUCTS

2.1 GENERAL MOTOR REQUIREMENTS

A. Comply with NEMA MG 1 unless otherwise indicated.

2.2 MOTOR CHARACTERISTICS

- A. Duty: Continuous duty at ambient temperature of 40 deg C and at altitude of 3300 feet (1000 m) above sea level.
- B. Capacity and Torque Characteristics: Sufficient to start, accelerate, and operate connected loads at designated speeds, at installed altitude and environment, with indicated operating sequence, and without exceeding nameplate ratings or considering service factor.

2.3 POLYPHASE MOTORS

- A. Description: NEMA MG 1, Design B, medium induction motor.
- B. Efficiency: Energy efficient, as defined in NEMA MG 1.
- C. Service Factor: 1.15.

- D. Multispeed Motors: Variable torque.
 - 1. For motors with 2:1 speed ratio, consequent pole, single winding.
 - 2. For motors with other than 2:1 speed ratio, separate winding for each speed.
- E. Rotor: Random-wound, squirrel cage.
- F. Bearings: Regreasable, shielded, antifriction ball bearings suitable for radial and thrust loading.
- G. Temperature Rise: Match insulation rating.
- H. Insulation: **Class F**.
- I. Code Letter Designation:
 - 1. Motors **15** HP and Larger: NEMA starting Code F or Code G.
 - 2. Motors Smaller than **15** HP: Manufacturer's standard starting characteristic.
- J. Enclosure Material: Cast iron for motor frame sizes **324T** and larger; rolled steel for motor frame sizes smaller than **324T**.

2.4 SINGLE-PHASE MOTORS

- A. Motors larger than 1/20 hp shall be one of the following, to suit starting torque and requirements of specific motor application:
 - 1. Permanent-split capacitor.
 - 2. Split phase.
 - 3. Capacitor start, inductor run.
 - 4. Capacitor start, capacitor run.
- B. Multispeed Motors: Variable-torque, permanent-split-capacitor type.
- C. Bearings: Prelubricated, antifriction ball bearings or sleeve bearings suitable for radial and thrust loading.
- D. Motors 1/20 HP and Smaller: Shaded-pole type.
- E. Thermal Protection: Internal protection to automatically open power supply circuit to motor when winding temperature exceeds a safe value calibrated to temperature rating of motor insulation. Thermal-protection device shall automatically reset when motor temperature returns to normal range.

PART 3 - EXECUTION (Not Applicable)

END OF SECTION 230513

SECTION 230548.13 - VIBRATION CONTROLS FOR HVAC

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. Elastomeric isolation pads.
- 2. Housed-spring isolators.
- 3. Restrained-spring isolators.
- 4. Housed-restrained-spring isolators.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Delegated-Design Submittal: For each vibration isolation device.
 - 1. Include design calculations for selecting vibration isolators.

PART 2 - PRODUCTS

2.1 ELASTOMERIC ISOLATION PADS

A. Elastomeric Isolation Pads:

- 1. Fabrication: Single or multiple layers of sufficient durometer stiffness for uniform loading over pad area.
- 2. Size: Factory or field cut to match requirements of supported equipment.
- 3. Pad Material: Oil and water resistant with elastomeric properties.
- 4. Surface Pattern: **Smooth** pattern.
- 5. Infused nonwoven cotton or synthetic fibers.
- 6. Load-bearing metal plates adhered to pads.

2.2 HOUSED-SPRING ISOLATORS

- A. Freestanding, Laterally Stable, Open-Spring Isolators in Two-Part Telescoping Housing:
 - 1. Outside Spring Diameter: Not less than 80 percent of the compressed height of the spring at rated load.
 - 2. Minimum Additional Travel: 50 percent of the required deflection at rated load.
 - 3. Lateral Stiffness: More than 80 percent of rated vertical stiffness.
 - 4. Overload Capacity: Support 200 percent of rated load, fully compressed, without deformation or failure.
 - 5. Two-Part Telescoping Housing: A steel top and bottom frame separated by an elastomeric material and enclosing the spring isolators.

- a. Drilled base housing for bolting to structure with an elastomeric isolator pad attached to the underside. Bases shall limit floor load to 500 psig (3447 kPa).
- b. Top housing with [attachment and leveling bolt] [threaded mounting holes and internal leveling device] [elastomeric pad].

2.3 RESTRAINED-SPRING ISOLATORS

- A. Freestanding, Laterally Stable, Open-Spring Isolators with Vertical-Limit Stop Restraint.
 - 1. Housing: Steel housing with vertical-limit stops to prevent spring extension due to weight being removed.
 - a. Base with holes for bolting to structure with an elastomeric isolator pad attached to the underside. Bases shall limit floor load to 500 psig (3447 kPa).
 - b. Top plate with **elastomeric pad**.
 - c. Internal leveling bolt that acts as blocking during installation.
 - 2. Restraint: Limit stop as required for equipment and authorities having jurisdiction.
 - 3. Outside Spring Diameter: Not less than 80 percent of the compressed height of the spring at rated load.
 - 4. Minimum Additional Travel: 50 percent of the required deflection at rated load.
 - 5. Lateral Stiffness: More than 80 percent of rated vertical stiffness.
 - 6. Overload Capacity: Support 200 percent of rated load, fully compressed, without deformation or failure.

2.4 HOUSED-RESTRAINED-SPRING ISOLATORS

- A. Freestanding, Steel, Open-Spring Isolators with Vertical-Limit Stop Restraint in Two-Part Telescoping Housing:
 - 1. Two-Part Telescoping Housing: A steel top and bottom frame separated by an elastomeric material and enclosing the spring isolators. Housings are equipped with **non-adjustable** snubbers to limit vertical movement.
 - a. Drilled base housing for bolting to structure with an elastomeric isolator pad attached to the underside. Bases shall limit floor load to 500 psig (3447 kPa).
 - b. Threaded top housing with adjustment bolt and cap screw to fasten and level equipment.
 - 2. Outside Spring Diameter: Not less than 80 percent of the compressed height of the spring at rated load.
 - 3. Minimum Additional Travel: 50 percent of the required deflection at rated load.
 - 4. Lateral Stiffness: More than 80 percent of rated vertical stiffness.
 - 5. Overload Capacity: Support 200 percent of rated load, fully compressed, without deformation or failure.

PART 3 - EXECUTION

3.1 VIBRATION CONTROL DEVICE INSTALLATION

- A. Coordinate the location of embedded connection hardware with supported equipment attachment and mounting points and with requirements for concrete reinforcement and formwork.
- B. Installation of vibration isolators must not cause any change of position of equipment, piping, or ductwork resulting in stresses or misalignment.

END OF SECTION 230548.13

SECTION 237313 - MODULAR INDOOR CENTRAL-STATION AIR-HANDLING UNITS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Constant-air-volume, single-zone air-handling units.

1.2 PERFORMANCE REQUIREMENTS

A. Delegated Design: Design vibration isolation and seismic-restraint details, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.

1.3 ACTION SUBMITTALS

- A. Product Data: For each air-handling unit indicated.
 - 1. Unit dimensions and weight.
 - 2. Cabinet material, metal thickness, finishes, insulation, and accessories.
 - 3. Fans:
 - a. Certified fan-performance curves with system operating conditions indicated.
 - b. Certified fan-sound power ratings.
 - c. Fan construction and accessories.
 - d. Motor ratings, electrical characteristics, and motor accessories.
 - 4. Certified coil-performance ratings with system operating conditions indicated.
 - 5. Dampers, including housings, linkages, and operators.
 - 6. Filters with performance characteristics.
 - 7. Compliance to the specifications sheet.
- B. Delegated-Design Submittal: For vibration isolation indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
 - 1. Vibration Isolation Base Details: Detail fabrication including anchorages and attachments to structure and to supported equipment. Include adjustable motor bases, rails, and frames for equipment mounting.
 - 2. Design Calculations: Calculate requirements for selecting vibration isolators and for designing vibration isolation bases.

1.4 INFORMATIONAL SUBMITTALS

A. Source quality-control reports.

1.5 CLOSEOUT SUBMITTALS

- A. Operation and maintenance manuals with troubleshooting and programming for the system.
- B. Spare parts list for 1 year and 5 years.

1.6 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. NFPA Compliance: Comply with NFPA 90A for design, fabrication, and installation of airhandling units and components.
- C. ARI Certification: Air-handling units and their components shall be factory tested according to ARI 430, "Central-Station Air-Handling Units," and shall be listed and labeled by ARI.
- D. ASHRAE Compliance: Applicable requirements in ASHRAE 62.1, Section 5 "Systems and Equipment" and Section 7 "Construction and Startup."
- E. ASHRAE/IESNA 90.1 Compliance: Applicable requirements in ASHRAE/IESNA 90.1, Section 6 "Heating, Ventilating, and Air-Conditioning."
- F. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Approved manufacturers, Johnson Controls, EGAT, Saiver or approved equal.

2.2 UNIT CASINGS

- A. General Fabrication Requirements for Casings:
 - 1. Forming: Form walls, roofs, and floors with at least two breaks at each joint.
 - 2. Casing Joints: Sheet metal screws or pop rivets.
 - 3. Sealing: Seal all joints with water-resistant sealant.
 - 4. Factory Finish for Steel and Galvanized-Steel Casings: Apply manufacturer's standard primer immediately after cleaning and pretreating.
 - 5. Airstream Surfaces: Surfaces in contact with the airstream shall comply with requirements in ASHRAE 62.1.

B. Casing Insulation and Adhesive:

- 1. Materials: ASTM C 1071, Type I or Type II.
- 2. Location and Application: Factory applied with adhesive and mechanical fasteners to the internal surface of section panels downstream from, and including, the cooling-coil section.
 - a. Liner Adhesive: Comply with ASTM C 916, Type I.
 - b. Mechanical Fasteners: Galvanized steel, suitable for adhesive attachment, mechanical attachment, or welding attachment to duct without damaging liner when applied as recommended by manufacturer and without causing leakage in cabinet.
 - c. Liner materials applied in this location shall have air-stream surface coated with a temperature-resistant coating or faced with a plain or coated fibrous mat or fabric depending on service-air velocity.
- 3. Location and Application: Encased between outside and inside casing.

C. Inspection and Access Panels and Access Doors:

- 1. Panel and Door Fabrication: Formed and reinforced, single- or double-wall and insulated panels of same materials and thicknesses as casing.
- 2. Inspection and Access Panels:
 - a. Fasteners: Two or more camlock type for panel lift-out operation. Arrangement shall allow panels to be opened against air-pressure differential.
 - b. Gasket: Neoprene, applied around entire perimeters of panel frames.
 - c. Size: Large enough to allow inspection and maintenance of air-handling unit's internal components.

3. Access Doors:

- a. Hinges: A minimum of two ball-bearing hinges or stainless-steel piano hinge and two wedge-lever-type latches, operable from inside and outside. Arrange doors to be opened against air-pressure differential.
- b. Gasket: Neoprene, applied around entire perimeters of panel frames.
- c. Fabricate windows in **fan section** doors of double-glazed, wire-reinforced safety glass with an air space between panes and sealed with interior and exterior rubber seals.
- d. Size: At least 24 inches (600 mm) wide by full height of unit casing up to a maximum height of 60 inches (1500 mm).

4. Locations and Applications:

- a. Fan Section: **Inspection and access panels**.
- b. Access Section: Doors.
- c. Coil Section: Inspection and access panel.
- d. Damper Section: Inspection and access panels.
- e. Filter Section: **Access doors** large enough to allow periodic removal and installation of filters.
- f. Mixing Section: Doors.

- g. Humidifier Section: Doors.
- 5. Service Light: 100-W vaporproof fixture with switched junction box located **inside** adjacent to door.
 - a. Locations: Each section accessed with door.

D. Condensate Drain Pans:

- 1. Fabricated with **two** percent slope in at least two planes to collect condensate from cooling coils (including coil piping connections, coil headers, and return bends) and from humidifiers and to direct water toward drain connection.
 - a. Length: Extend drain pan downstream from leaving face to comply with ASHRAE 62.1.
 - b. Depth: A minimum of 2 inches (50 mm) deep.
- 2. Formed sections or Integral part of floor plating.
- 3. Single-wall, stainless-steel sheet.
- 4. Drain Connection: Located at lowest point of pan and sized to prevent overflow. Terminate with threaded nipple on **both ends** of pan.
 - a. Minimum Connection Size: NPS 1 1/4 (DN 32).
- 5. Pan-Top Surface Coating: Asphaltic waterproofing compound.
- 6. Units with stacked coils shall have an intermediate drain pan to collect condensate from top coil.
- E. Air-Handling-Unit Mounting Frame: Formed galvanized-steel channel or structural channel supports, designed for low deflection, welded with integral lifting lugs.
 - 1. Seismic Fabrication Requirements: Fabricate mounting base and attachment to air-handling unit sections, accessories, and components with reinforcement strong enough to withstand seismic forces defined in Section 230548.13 "Vibration Controls for HVAC" when air-handling unit frame is anchored to building structure.

2.3 FAN, DRIVE, AND MOTOR SECTION

- A. Fan and Drive Assemblies: Statically and dynamically balanced and designed for continuous operation at maximum-rated fan speed and motor horsepower.
 - 1. Shafts: Designed for continuous operation at maximum-rated fan speed and motor horsepower, and with field-adjustable alignment.
 - a. Turned, ground, and polished hot-rolled steel with keyway. Ship with a protective coating of lubricating oil.
 - b. Designed to operate at no more than 70 percent of first critical speed at top of fan's speed range.
- B. Centrifugal Fan Housings: Formed- and reinforced-steel panels to form curved scroll housings with shaped cutoff and spun-metal inlet bell.

- 1. Bracing: Steel angle or channel supports for mounting and supporting fan scroll, wheel, motor, and accessories.
- 2. Horizontal-Flanged, Split Housing: Bolted construction.
- 3. Housing for Supply Fan: Attach housing to fan-section casing with metal-edged flexible duct connector.
- 4. Flexible Connector: Factory fabricated with a fabric strip 3-1/2 inches (89 mm) wide attached to 2 strips of 2-3/4-inch- (70-mm-) wide, 0.028-inch- (0.7-mm-) thick, galvanized-steel sheet; select metal compatible with casing.
 - a. Flexible Connector Fabric: Glass fabric, double coated with neoprene. Fabrics, coatings, and adhesives shall comply with UL 181, Class 1.
 - 1) Fabric Minimum Weight: 26 oz./sq. yd. (880 g/sq. m).
 - 2) Fabric Tensile Strength: 480 lbf/inch (84 N/mm) in the warp and 360 lbf/inch (63 N/mm) in the filling.
 - Fabric Service Temperature: Minus 40 to plus 200 deg F (Minus 40 to plus 93 deg C).
- C. Plenum Fan Housings: Steel frame and panel; fabricated without fan scroll and volute housing.
- D. Forward-Curved, Centrifugal Fan Wheels: Inlet flange, backplate, and shallow blades with inlet and tip curved forward in direction of airflow and mechanically fastened to flange and backplate; cast-steel hub swaged to backplate and fastened to shaft with set screws.
- E. Fan Shaft Bearings:
 - 1. Prelubricated and Sealed, Ball Bearings: Self-aligning, pillow-block type with a rated life of **50,000** hours according to ABMA 9.
 - 2. Grease-Lubricated, Tapered-Roller Bearings: Self-aligning, pillow-block type with double-locking collars and 2-piece, cast-iron housing with grease lines extended to outside unit] and a rated life of 50,000 hours according to ABMA 11.
 - 3. Grease-Lubricated Bearings: Self-aligning, pillow-block-type, ball or roller bearings with adapter mount and two-piece, cast-iron housing with grease lines extended to outside unit.
- F. Belt Drives: Factory mounted, with adjustable alignment and belt tensioning, and with 1.2 service factor based on fan motor.
 - 1. Pulleys: Cast iron or cast steel with split, tapered bushing; dynamically balanced at factory.
 - 2. Motor Pulleys: Adjustable pitch for use with 5 hp motors and smaller; fixed pitch for use with motors larger than 5 hp. Select pulley size so pitch adjustment is at the middle of adjustment range at fan design conditions.
 - 3. Belts: Oil resistant, nonsparking, and nonstatic; in matched sets for multiple-belt drives.
 - 4. Belt Guards: Comply with requirements specified by OSHA and fabricate according to SMACNA's "HVAC Duct Construction Standards"; 0.1046-inch- (2.7-mm-) thick, 3/4-inch (20-mm) diamond-mesh wire screen, welded to steel angle frame; prime coated.
- G. Internal Vibration Isolation: Fans shall be factory mounted with manufacturer's standard vibration isolation mounting devices having a minimum static deflection of 1 inch (25 mm).

H. Motor:

- 1. Enclosure Type: Totally enclosed, fan cooled.
- 2. NEMA Premium (TM) efficient motors as defined in NEMA MG 1.
- 3. Motor Sizes: Minimum size as indicated. If not indicated, large enough so driven load will not require motor to operate in service factor range above 1.0.
- 4. Controllers, Electrical Devices, and Wiring: Comply with requirements for electrical devices and connections specified in electrical Sections.
- 5. Mount unit-mounted disconnect switches on **exterior** of unit.

2.4 COIL SECTION

A. General Requirements for Coil Section:

- 1. Comply with ARI 410.
- 2. Fabricate coil section to allow removal and replacement of coil for maintenance and to allow in-place access for service and maintenance of coil(s).
- 3. Coils shall not act as structural component of unit.
- B. Electrical Heating Coils, Controls, and Accessories: Comply with UL 1995.
 - 1. Casing Assembly: **Slip-in** type with galvanized-steel frame.
 - 2. Sheathed Heating Elements: Coiled resistance wire of 80 percent nickel and 20 percent chromium surrounded by compacted magnesium-oxide powder in tubular-steel sheath; with spiral-wound, copper-plated, steel fins continuously brazed to sheath.
 - 3. Open Heating Elements: Resistance wire of 80 percent nickel and 20 percent chromium supported and insulated by floating ceramic bushings recessed into casing openings, fastened to supporting brackets, and mounted in galvanized-steel frame.
 - 4. Over temperature Protection: Disk-type, automatically resetting, thermal-cutout, safety device; serviceable through terminal box without removing heater from coil section.
 - 5. Secondary Protection: Load-carrying, manually resetting or manually replaceable, thermal cutouts; factory wired in series with each heater stage.
 - 6. Control Panel: Unit mounted with disconnecting means and overcurrent protection.
 - a. **Magnetic** contactor.
 - b. Solid-state, stepless pulse controller.
 - c. Toggle switches, one per step.
 - d. Step controller.
 - e. Time-delay relay.
 - f. Pilot lights, one per step.
 - g. Airflow proving switch.

2.5 AIR FILTRATION SECTION

A. General Requirements for Air Filtration Section:

- 1. Comply with NFPA 90A.
- 2. Provide minimum arrestance according to ASHRAE 52.1, and a minimum efficiency reporting value (MERV) according to ASHRAE 52.2.

- 3. Provide filter holding frames arranged for flat or angular orientation, with access doors on both sides of unit. Filters shall be removable from one side or lifted out from access plenum.
- B. Extended-Surface, Disposable Pleated Panel Filters:
 - 1. Factory-fabricated, dry, extended-surface type.
 - 2. Thickness: 2 inches (50 mm).
 - 3. Arrestance (ASHRAE 52.1): >90%.
 - 4. Merv (ASHRAE 52.2): **8**.
 - 5. Media: Fibrous material formed into deep -V-shaped pleats with antimicrobial agent and held by self-supporting wire grid.
 - 6. Media-Grid Frame: Nonflammable cardboard.
 - 7. Mounting Frames: Welded, galvanized steel, with gaskets and fasteners, suitable for bolting together into built-up filter banks.

C. Bag Filters:

- 1. Factory-fabricated, dry, extended-surface type.
- 2. Thickness: 2 inches (50 mm).
- 3. Arrestance (ASHRAE 52.1): >95%.
- 4. Merv (ASHRAE 52.2): **15**.
- 5. Media: Flexible microfine fiberglass or synthetic media. 300 to 900 mm (12 to 36 in.) deep, 6 to 12 pockets.
- 6. Mounting Frames: Welded, galvanized steel, with gaskets and fasteners, suitable for bolting together into built-up filter banks.

D. Filter Gage:

- 1. **3-1/2-inch- (90-mm-)** diameter, diaphragm-actuated dial in metal case.
- 2. Vent valves.
- 3. Black figures on white background.
- 4. Front recalibration adjustment.
- 5. **2** percent of full-scale accuracy.
- 6. Range: 0- to 2.0-inch wg (0 to 500 Pa).
- 7. Accessories: Static-pressure tips with integral compression fittings, 1/4-inch (6-mm) plastic tubing, and 2- or 3-way vent valves.

2.6 DAMPERS

- A. General Requirements for Dampers: Leakage rate, according to AMCA 500, "Laboratory Methods for Testing Dampers for Rating," shall not exceed 2 percent of air quantity at 2000-fpm (10-m/s) face velocity through damper and 4-inch wg (1000-Pa) pressure differential.
- B. Electronic Damper Operators:
 - 1. Direct-coupled type designed for minimum 60,000 full-stroke cycles at rated torque.
 - 2. Electronic damper position indicator shall have visual scale indicating percent of travel and 2- to 10-V dc, feedback signal.

- 3. Operator Motors:
 - a. Size to operate with sufficient reserve power to provide smooth modulating action or two-position action.
 - b. Permanent Split-Capacitor or Shaded-Pole Type: Gear trains completely oil immersed and sealed. Equip spring-return motors with integral spiral-spring mechanism in housings designed for easy removal for service or adjustment of limit switches, auxiliary switches, or feedback potentiometer.
- 4. Nonspring-Return Motors for Dampers Larger Than 25 Sq. Ft. (2.3 sq. m): Size for running torque of 150 in. x lbf (16.9 N x m) and breakaway torque of 300 in. x lbf (33.9 N x m).
- 5. Spring-Return Motors for Dampers Larger Than 25 Sq. Ft. (2.3 sq. m): Size for running and breakaway torque of 150 in. x lbf (16.9 N x m).
- 6. Size dampers for running torque calculated as follows:
 - a. Parallel-Blade Damper with Edge Seals: 7 inch-lb/sq. ft. (86.8 kg-cm/sq. m) of damper.
 - b. Opposed-Blade Damper with Edge Seals: 5 inch-lb/sq. ft. (62 kg-cm/sq. m) of damper.
 - c. Parallel-Blade Damper without Edge Seals: 4 inch-lb/sq. ft (49.6 kg-cm/sq. m) of damper.
 - d. Opposed-Blade Damper without Edge Seals: 3 inch-lb/sq. ft. (37.2 kg-cm/sq. m) of damper.
 - e. Dampers with 2- to 3-Inch wg (500 to 750 Pa) of Pressure Drop or Face Velocities of 1000 to 2500 fpm (5 to 13 m/s): Increase running torque by 1.5.
 - f. Dampers with 3- to 4-Inch wg (750 to 1000 Pa) of Pressure Drop or Face Velocities of 2500 to 3000 fpm (13 to 15 m/s): Increase running torque by 2.0.
- 7. Coupling: V-bolt and V-shaped, toothed cradle.
- 8. Overload Protection: Electronic overload or digital rotation-sensing circuitry.
- 9. Fail-Safe Operation: Mechanical, spring-return mechanism with external, manual gear release on nonspring-return actuators.
- 10. Power Requirements (Two-Position Spring Return): 24V ac.
- 11. Power Requirements (Modulating): Maximum 10 VA at 24-V ac or 8 W at 24-V dc.
- 12. Proportional Signal: 2- to 10-V dc or 4 to 20 mA, and 2- to 10-V dc position feedback signal.
- 13. Temperature Rating: 40 to 104 deg F (5 to 40 deg C).
- 14. Run Time: [12 seconds open, 5 seconds closed]
- C. Outdoor- and Return-Air Mixing Dampers: Parallel-blade, **extruded-aluminum** dampers mechanically fastened to **cadmium-plated** steel operating rod in reinforced cabinet. Connect operating rods with common linkage and interconnect linkages so dampers operate simultaneously.
- D. Mixing Section: Multiple-blade, air-mixer assembly located immediately downstream of mixing section.
- E. Combination Filter and Mixing Section:
 - 1. Cabinet support members shall hold 2-inch- (50-mm-) thick, pleated, flat, permanent or throwaway filters.

- 2. Cabinet support members shall hold Bag filters.
- 3. Multiple-blade, air-mixer assembly shall mix air to prevent stratification, located immediately downstream of mixing box.

2.7 CAPACITIES AND CHARACTERISTICS (For AHU-8)

A. Casing: For space limitation reasons maximum overall unit dimensions shall be L: 3.81, W: 1.65 and H: 1.2m

- 1. Outside Casing: Galvanized steel, minimum 0.064 inch (1.6 mm)> thick.
- 2. Inside Casing: Galvanized steel, solid, minimum 0.064 inch (1.6 mm) thick.
- 3. Floor Plate: Galvanized steel, minimum 0.079 inch (2.0 mm) thick.
- 4. Insulation Thickness: 1 inch (25 mm).
- 5. Static-Pressure Classifications for Unit Sections before Fans: 8-inch wg (2000 Pa).
- 6. Static-Pressure Classifications for Unit Sections after Fans: 8-inch wg (2000 Pa).

B. Supply Fan:

- 1. Class I AMCA 99-2408.
- 2. Drive: V-belt.
- 3. Type: Galvanized-steel, forward-curved centrifugal.
- 4. Airflow: **4326 cfm**.
- 5. External Static Pressure: **0.45 inches wg**.
- 6. Speed: **800 rpm**.
- 7. Maximum Outlet Velocity: 1100 fpm.
- 8. Motor Size: **3 HP**.
- 9. Motor Speed: **1500 rpm**.
- 10. Electrical Characteristics:
 - a. Volts: 380
 - b. Phase: **Three**.
 - c. Hertz: 50.
 - d. Full-Load Amperes:
 - e. Minimum Circuit Ampacity:
 - f. Maximum Overcurrent Protection:
- 11. Fan Discharge Sound Power: Shall be submitted by manufacturer.
- 12. Water:
 - a. Water Flow: 24 gpm.
 - b. Maximum Water Pressure Drop: 4.5 feet of head.
 - c. Entering-Water Temperature: 45 deg F.
 - d. Leaving-Water Temperature: 57.4 deg F.

C. Cooling Coil:

- 1. Sensible Heat-Transfer Rate: 117 MBtu/h.
- 2. Total Heat-Transfer Rate: 145 MBtu/h.
- 3. Entering-Air, Dry-Bulb Temperature: **100.6 deg F**.
- 4. Entering-Air, Wet-Bulb Temperature: **76.7 deg F**.

- 5. Leaving-Air, Dry-Bulb Temperature: **57.1 deg F**.
- 6. Leaving-Air, Wet-Bulb Temperature: **56.1 deg F**.
- 7. Face Area: **7.53 sq. ft.**
- 8. Maximum Face Velocity: **383 fpm**.
- 9. Maximum Air-Side, Static-Pressure Drop: **0.64 inches wg**.
- 10. Coil Type: Cleanable.
- 11. Piping Connections: Flanged of coil.
- 12. Tube Material: Copper.
- 13. Tube Thickness: 5/8 inches.
- 14. Fin Type: **Plate**.
- 15. Fin Material: Aluminum
- 16. Fin Spacing: Not less than 0.125 inch (3.18 mm).
- 17. Fin Thickness: Shall be submitted by manufacturer.
- 18. Fin and Tube Joint: **Mechanical bond**.
- 19. Headers:
 - a. Seamless copper tube with brazed joints, prime coated.
 - b. Provide insulated cover to conceal headers exposed outside casings.
- 20. Frames: Channel frame, [0.064-inch- (1.6-mm-) thick galvanized steel.
- 21. Number of Rows: 4.
- 22. Coil Working-Pressure Ratings: 200 psig (1380 kPa), 325 deg F (163 deg C).
- 23. Water:
 - a. Water Flow: 24 gpm.
 - b. Maximum Water Pressure Drop: 4.5 **feet of head**.
 - c. Entering-Water Temperature: 45 deg F.
 - d. Leaving-Water Temperature: 57.4 deg F.

D. Electric Pre-Heating Coil:

- 1. Power: **41 (kW)**.
- 2. Airflow: **4326 cfm**.
- 3. Entering-Air Temperature: **45.9** deg F.
- 4. Leaving-Air Temperature: 75 deg F.
- 5. Volts: **380**.
- 6. Phase: **Three**.
- 7. Hertz: 50.
- 8. Number of Steps: 10.

E. Prefilters:

- 1. Type: Extended-Surface, Disposable Pleated Panel Filters.
- 2. Face Area: To be included in manufacturer submittal.
- 3. Surface Area: To be included in manufacturer submittal.
- 4. Thickness or Depth: 2 inches.
- 5. Number of Filters: **To be included in manufacturer submittal.**
- 6. Access Location: **Side**.
- 7. Maximum or Rated Face Velocity: To be included in manufacturer submittal.

F. Filters:

- 1. Type: **Bag filters**.
- 2. Face Area: To be included in manufacturer submittal.
- 3. Surface Area: To be included in manufacturer submittal.
- 4. Thickness or Depth: **36 inches**.
- 5. Number of Filters: **To be included in manufacturer submittal.**
- 6. Access Location: **Side**.
- 7. Maximum or Rated Face Velocity: **To be included in manufacturer submittal.**
- G. Dampers: Outside air damper, Return air damper.

2.8 SOURCE QUALITY CONTROL

- A. Fan Sound-Power Level Ratings: Comply with AMCA 301, "Methods for Calculating Fan Sound Ratings from Laboratory Test Data." Test fans according to AMCA 300, "Reverberant Room Method for Sound Testing of Fans." Fans shall bear AMCA-certified sound ratings seal.
- B. Fan Performance Rating: Factory test fan performance for airflow, pressure, power, air density, rotation speed, and efficiency. Rate performance according to AMCA 210, "Laboratory Methods of Testing Fans for Aerodynamic Performance Rating."
- C. Water Coils: Factory tested to 300 psig (2070 kPa) according to ARI 410 and ASHRAE 33.

PART 3 - EXECUTION

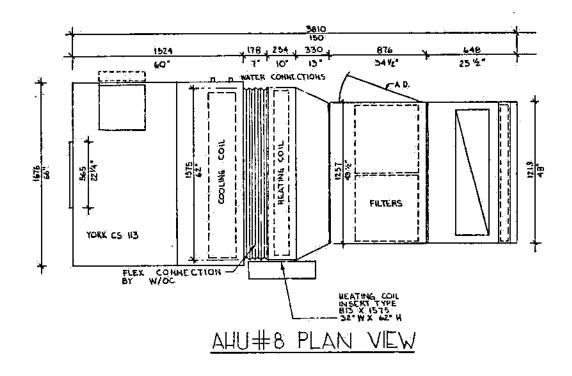
3.1 INSTALLATION

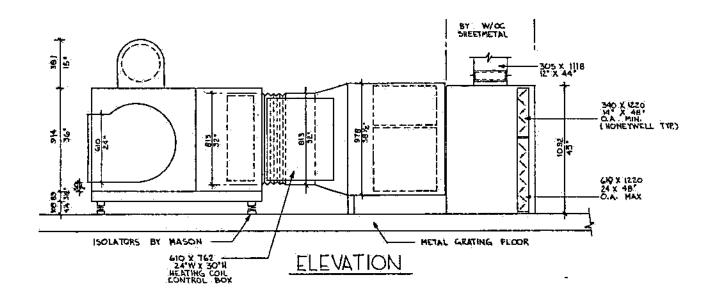
(Not part of this scope).

END OF SECTION 237313

ATAO 8-UHA







P.O. Box 1592, York, PA. 17405



TYPE CS AIR HANDLING UNIT MODEL SH

1 of 2	
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Form 100,07-PA2 (182)

(SINGLE ZONE, DRAW-THRU, HORIZONTAL)

	<u></u>		
CONTRACTOR Wallace Internation ORDER NO. 301-765-002	PURCHASER	Wallace International U.S. Embassy	_
YORK CONTRACT NO. 83-34037 YORK ORDER NO.	LOCATION _ ENGINEER _	Cairo, Egypt Hankins & Anderson	_
D REFERENCE DATE	APPROVAL	DATE 10/21/83 CONSTRUCTION DATE	_

Supersedes: 100,07-PA2 (279)

All B

BASIC UNIT (see Description at right)

DESCRIPTION

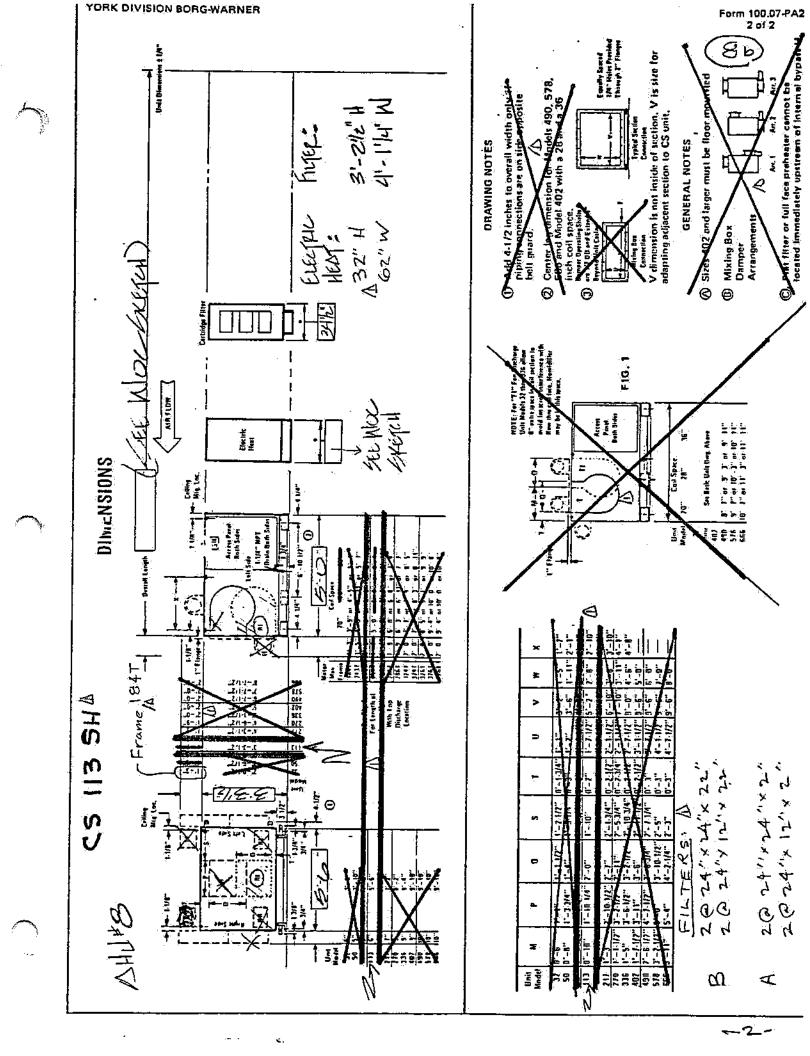
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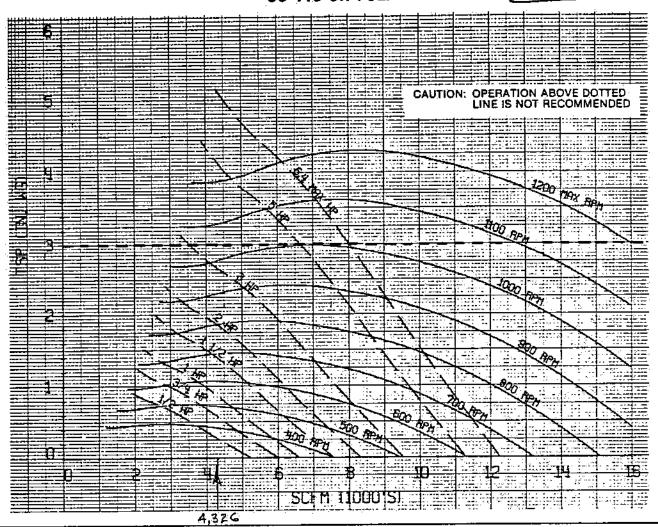
MWIL-LKH-1 NOV, 83

5/8" SS Coll (2 How Deep Max.). . 1 Row SD Coil . 4 Row DW... 7-3/8" 5 Row DW or DX

COIL MODULE (20" SPACE) 1/2" 8 Row DW - DX Coil Spacer(s) (If Required). . . Humidifier (After Last Coll 9-17). Preheat section accommodates up to a 2 Row Been SS, or

1 Row SD or up to 4 Row DW.





•		SP —		0.4		0+6		0.8		1.0		5.2		1.4		1.6	
•	CFH	FACE 5/8	VEL 1/2	RPM	Вн₽	RPH	ВНР	RPM	8HP	RPH	вне	RPH	ВНР	RPH	ВнР	RPM	∶внг
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	4500	397	401	398	0.7	465	0.5	526	1-0	581	1.2	635	1.4	686	1.6	736	8 - 1
	5000	441	445	411	0.8	475	1.0	533	1 - 5	587	1-4	638	1.6	686	1.8	733	2.
	5500	485	489	427	1.0	467	1.2	543	1,44	595	1-6	644	1.8	690	2.1	734	2 -
•	6000	529	534	444	1.2	500	1-4	554	1.7	604	1.9	651	2.1	696	2,4	739	2.
	6500	574	576	462	1.5	515	1.7	566	1.9	614	2.2	660	2.4	704	2.7	746	2.
	7000	618	623	481	1.7	-532	2.0	:580	2.3	626	2.5	:670	2.8	713	3.0	753	3.
	7500	662	667	:50 L	2.0	549	2.3	5.95	2.6	639	2.9	682	3.2	723	3.5	762	3.
	6000	706	71.2	522	2.4	567	2+7	611	3.0	654	3-3	694	3.0	734	3.9	772	4.
	8500	750	756	543	2.8	587	3.1	626	3.4	669	3.8	708	4.1	746	4.4	783	
	9000	794	801	565	3.2	606	3.6	646	3.9	685	4.3	723	4.6	760	4.9	796	5.
	9500	838	845	587	3.7	62.7	4.1	665	4.4	703	4.8	739	5.2	774	5.5	809	5.
				610	•	648	4.6	685	5.0	721	5.4	756	5.6	790	6+2	·	·
	10000	862	889	410	4.2						1		-				
	10000	926	934	633	4.8	669	5.2	705	5.6	739	6.0						
					4.8	669			5.6	739		 2.		 2.		3.	
		926 SP FACE	934 	633	4.8	669	5.2	705	5.6	 							.0
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326	10500 CFM	926 SP FACE	934 	633	a.a a 1,8	669 3 2. RPM 841	5.2 BHP	705 2. 2P# 886	5.6 2 BHP 2.3	2 APH 933	8HP	2. ПРМ 976	6 BHP 2+8	2. RPM 1016	8 8HP 3.0	3. RPM L054	.0 B∺
326	10500	926 SP FACE 5/8	934 VEL 1/2	633 1.	е 1/8: вир	841 830	5.2 BHP 2.0 2.3	705 2. RP# 886 875	2 BHP 2-3 2-5	2 яря 933 919	2.5 2.7	2. ПРМ 976 961	6 BHP 2.8 3.0	2. RPM 1016 1003	8HP 3.0 3.3	3. RPM 1054 1043	84 3.
32G	10500 CFM	926 SP FACE 5/8 353	934 VEL 1/2 356	633 1. APM 793	8HP 1.8 2.0 2.3	809 RPM 841 830 823	5.2 BHP 2.0 2.3 2.5	705 2. 2P# 886 875 866	2 BHP 2-3 2-5 2-7	2. APM 933 919 906	2.5 2.7 3.0	2.0 RPM 976 961 949	6 BHP 2.8 3.0 3.3	2- RPM 1016 1003 989	8HP 3.0 3.3 3.5	3. RPM 1054 1043 1026	3. 3. 3.
326	10500 CFM 4000	926 SP FACE 5/8 353 397 441 485	934 VEL 1/2 356 401 445 489	793 764 778	8HP 1.8 2.0 2.3 2.5	841 830 823 820	5.2 BHP 2.0 2.3 2.5 2.8	705 2. 2PM 886 875 866 861	2.3 2.5 2.7 3.0	2: APM 933 919 908 901	2.5 2.7 3.0 3.3	2. RPM 976 961 949 941	2.8 3.0 3.3	2- RPM 1016 1003 989 979	3.0 3.3 3.5 3.5	3. RPM 1054 1043 1026 1017	3. 3. 3.
326 — P	10500 CF4 4000 4500 5000	926 SP FACE 5/8 353 397 441	934 VEL 1/2 356 401 445	793 764 778 780	8HP 1.8 2.0 2.3 2.5 2.8	841 830 823 820 820	5.2 BHP 2.0 2.3 2.5 2.6 3.1	705 2. 2P# 886 875 866 861 860	2-3 2-5 2-7 3-0	24 APM 933 919 908 901 898	2.5 2.7 3.0 3.3	24 RPM 976 961 949 941 936	2.8 3.0 3.3 3.6	2- RPM 1016 1003 989 979 973	3.0 3.3 3.5 3.6	3. RPM 1054 1043 1026 1017	3. 3. 3.
32G	4000 4500 5000 5500	926 SP FACE 5/8 353 397 441 485	934 VEL 1/2 356 401 445 489	793 784 779 778 780 785	8HP 1.8 2.0 2.3 2.5 2.8 3.2	8041 823 820 820 820 824	5.2 BHP 2.0 2.3 2.5 2.8 3.1 3.5	705 2. RPM 886 875 866 861 860 801	2-3 2-5 2-7 3-0 3-4 3-7	24 8PM 933 919 906 901 898 898	2.5 2.7 3.0 3.3	24 RPM 976 961 949 941 936 935	2.8 3.0 3.3 3.6	2- RPM 1016 1003 989 979 973 973	8HP 3.0 3.3 3.5 3.6 4.2	3. RPM 1054 1043 1026 1017 1009 1005	3. 3. 3.
32G	4000 4500 5000 5500	926 SP FACE 5/8 353 397 441 485 529	934 VEL 1/2 356 401 445 489 534	793 764 778 780	8HP 1.8 2.0 2.3 2.5 2.8	841 830 823 820 820 824 830	5.2 BHP 2.0 2.3 2.5 2.5 3.1 3.5 3.9	705 2. RPM 886 875 866 861 860 861	5.6 2 8HP 2.3 2.5 2.7 3.0 3.4 3.7 4.2	24 8PM 933 919 908 901 898 898 901	BHP 2.5 2.7 3.0 3.3 3.6 4.0	2 - RPM 976 961 949 941 936 935 936	8HP 2.8 3.0 3.3 3.6 3.9 4.3	2- RPM 1016 1003 989 979 973 970	3.0 3.3 3.5 3.6 4.7 4.6 5.0	3. RPM 1054 1043 1026 1017 1009 1005 1004	3. 3. 3. 4.
32G	10500 CF# 4000 4500 5000 5500 6000 6700 7500	926 SP FACE 5/8 353 397 441 485 529 574	934 VEL 1/2 356 401 445 489 534 576	793 764 778 780 785 793	8-1/8: 8HP 1-8 2-0 2-3 2-5 2-8 3-2 3-6 4-0	841 830 823 823 820 824 830 830	5.2 BHP 2.0 2.3 2.5 2.8 3.1 3.5 3.9	705 2. RPM 886 875 866 861 860 861	2-3 2-3 2-3 2-5 2-7 3-0 3-4 3-7 4-2 4-6	2- RPH 933 919 908 901 898 898 901	2.5 2.7 3.0 3.3 3.6 4.0 4.4	24 RPM 976 961 946 936 935	2.8 3.0 3.3 3.6 3.9 4.3 4.7	2- RPM 1016 1003 989 979 973 970 970	8MP 3.0 3.3 3.5 3.6 4.6 5.0 5.5	3- RPM 1054 1025 1027 1009 1005 1004	3. 3. 3. 4.
32G	10500 CF4 4000 4500 5500 6500 6500 7500 8000	926 SP FACE 578 353 397 441 485 529 574 618 662 706	934 VEL 1/2 356 401 445 489 534 578 623 667 712	793 784 779 780 785 785 800 809	8HP 1.8 2.0 2.3 2.5 2.8 3.2 3.6 4.0	669 2. RPM 841 830 523 820 620 624 830 837 845	5.2 BHP 2.0 2.3 2.5 2.8 3.1 3.5 3.9 4.3	705 2. RPM 886 875 866 861 860 861 866 873	2-3 2-5 2-5 2-7 3-0 3-4 3-7 4-2 4-6 5-1	20 RPM 933 919 908 901 898 901 907 914	2.5 2.7 3.0 3.3 3.6 4.0 4.4	2: RPM 976 961 949 941 935 936 940 940	2.8 3.0 3.3 3.6 3.9 4.3 4.7 5.2	2- RPM 1016 1003 989 979 979 970 970 973	8HP 3.0 3.3 3.5 3.6 4.6 5.0 5.5	3. RPM 1054 1043 1026 1017 1007 1005	3. 3. 3. 4. 4.
326	4000 4500 5000 5000 6500 7000 8500 8000 8500	926 SP FACE 578 353 397 441 485 529 574 616 706 750	934 VEL 1/2 356 401 445 489 534 578 627 712 756	793 784 779 778 780 785 790 800 809 819	8-1/8: 8HP 1-8 2-0 2-3 2-5 2-8 3-2 3-2 4-5 5-0	669 3 2. RPM 841 830 623 820 824 830 824 837 845	5.2 BHP 2.0 2.3 2.5 2.5 3.1 3.5 3.9 4.0 5.4	705 2. 2PH 886 875 866 861 860 861 863 888	5.6 2 BHP 2.3 2.5 2.5 3.0 3.4 3.7 4.2 4.6 5.1	20 RPM 933 919 908 901 B98 898 901 907 914	2.5 2.7 3.0 3.3 3.6 4.0 4.4 5.5 6.0	2. RPM 976 961 949 941 935 935 936 946 954	2.8 3.0 3.3 3.6 3.9 4.3 4.7 5.2 5.8 6.4	2- RPM 1016 1003 989 979 973 970 970 973	8HP 3.0 3.3 3.5 3.6 4.6 5.0 5.5	3. RPM 1054 1043 1026 1017 1009 1005	3. 3. 3. 4. 4.
326	4000 4500 5500 6500 6500 7500 8000 8500 9000	926 SP FACE 578 353 397 441 485 529 574 618 662 706	934 VEL 1/2 356 401 445 489 578 523 667 712 756 801	793 784 779 780 785 793 800 809 831	8 1/8: BHP 1.8 2.0 2.3 2.5 2.8 3.2 3.6 4.0 5.0 5.6	800 820 820 824 830 837 845 865	5.2 BHP 2.0 2.3 2.5 2.8 3.1 3.5 3.9 4.3 4.0 5.4	705 2. 2P# 886 875 866 861 860 861 860 888 888	5.6 2 BHP 2.3 2.5 2.5 3.0 3.4 3.7 4.2 4.6 5.1 5.7 6.3	2. RPM 933 919 908 901 898 901 907 914 921	2.5 2.7 3.0 3.3 3.6 4.0 4.4 5.5	2. RPM 976 961 946 935 936 946 954	8HP 2.8 3.0 3.1 3.6 3.9 4.3 4.7 5.8 6.4	2- RPM 1016 1003 989 979 973 970 970 978	8HP 3.0 3.3 3.5 3.6 4.6 5.0 5.5	3. RPM 1054 1043 1026 1017 1009 1005	3. 3. 3. 4. 4.
32G	4000 4500 5500 6000 6500 7500 8500 8500 9500	926 SP FACE 5/8 353 397 441 485 529 574 618 662 706 756 754 638	934 VEL 1/2 356 401 445 489 534 578 623 667 712 756 801 845	633 1- 8PM 793 784 779 780 785 793 800 809 819 643	BHP 1.8 2.0 2.3 2.5 2.8 3.6 4.0 4.5 5.6 6.2	841 830 823 820 820 824 830 837 845 855	5.2 BMP 2.0 2.3 2.5 2.8 3.1 3.5 3.9 4.3 4.6 5.4	705 2. RPM 886 875 866 861 860 861 860 873 889	5.6 2 2.3 2.5 2.7 3.0 3.4 3.7 4.2 4.6 5.1 5.7 6.3	2: RPM 933 919 908 901 901 901 914 921	2.5 2.7 3.0 3.3 3.6 4.0 4.4 4.9 5.5	2-6 RPM 976 961 949 946 935 936 940 954	2.8 3.0 3.1 3.6 3.9 4.3 4.7 5.2 5.8	2- RPM 1016 1003 989 970 973 970 973	3.0 3.3 3.5 3.6 4.6 5.0 5.5	3. RPM 1054 1043 1026 1017 1005 1004 1005	3. 3. 3. 4. 4.
52G	4000 4500 5500 6500 6500 7500 8000 8500 9000	926 SP FACE 578 353 397 441 485 529 574 618 662 700 750 794	934 VEL 1/2 356 401 445 489 578 523 667 712 756 801	793 784 779 780 785 793 800 809 831	8 1/8: BHP 1.8 2.0 2.3 2.5 2.8 3.2 3.6 4.0 5.0 5.6	800 820 820 824 830 837 845 865	5.2 BHP 2.0 2.3 2.5 2.8 3.1 3.5 3.9 4.3 4.0 5.4	705 2. 2P# 886 875 866 861 860 861 860 888 888	5.6 2 BHP 2.3 2.5 2.5 3.0 3.4 3.7 4.2 4.6 5.1 5.7 6.3	2. RPM 933 919 908 901 898 901 907 914 921	2.5 2.7 3.0 3.3 3.6 4.0 4.4 5.5	2. RPM 976 961 946 935 936 946 954	8HP 2.8 3.0 3.1 3.6 3.9 4.3 4.7 5.8 6.4	2- RPM 1016 1003 989 979 973 970 970 978	8HP 3.0 3.3 3.5 3.6 4.6 5.0 5.5	3. RPM 1054 1043 1026 1017 1009 1005	3. 3. 3. 4. 4.

WIL-LKH - 1 NOV 83

52.204-24 Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment.

As prescribed in 4.2105(a), insert the following provision:

Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment (Oct 2020)

The Offeror shall not complete the representation at paragraph (d)(1) of this provision if the Offeror has represented that it "does not provide covered telecommunications equipment or services as a part of its offered products or services to the Government in the performance of any contract, subcontract, or other contractual instrument" in paragraph (c)(1) in the provision at 52.204-26, Covered Telecommunications Equipment or Services—Representation, or in paragraph (v)(2)(i) of the provision at 52.212-3, Offeror Representations and Certifications-Commercial Items. The Offeror shall not complete the representation in paragraph (d)(2) of this provision if the Offeror has represented that it "does not use covered telecommunications equipment or services, or any equipment, system, or service that uses covered telecommunications equipment or services" in paragraph (c)(2) of the provision at 52.204-26, or in paragraph (v)(2)(ii) of the provision at 52.212-3.

(a) Definitions. As used in this provision—

Backhaul, covered telecommunications equipment or services, critical technology, interconnection arrangements, reasonable inquiry, roaming, and substantial or essential component have the meanings provided in the clause 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

(b) Prohibition.

- (1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. Nothing in the prohibition shall be construed to—
- (i) Prohibit the head of an executive agency from procuring with an entity to provide a service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

- (ii) Cover telecommunications equipment that cannot route or redirect user data traffic or cannot permit visibility into any user data or packets that such equipment transmits or otherwise handles.
- (2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract or extending or renewing a contract with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract. Nothing in the prohibition shall be construed to—
- (i) Prohibit the head of an executive agency from procuring with an entity to provide a service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
- (ii) Cover telecommunications equipment that cannot route or redirect user data traffic or cannot permit visibility into any user data or packets that such equipment transmits or otherwise handles.
- (c) *Procedures*. The Offeror shall review the list of excluded parties in the System for Award Management (SAM) (https://www.sam.gov) for entities excluded from receiving federal awards for "covered telecommunications equipment or services".
 - (d) Representation. The Offeror represents that—
- (1) It \Box will, \Box will not provide covered telecommunications equipment or services to the Government in the performance of any contract, subcontract or other contractual instrument resulting from this solicitation. The Offeror shall provide the additional disclosure information required at paragraph (e)(1) of this section if the Offeror responds "will" in paragraph (d)(1) of this section; and
- (2) After conducting a reasonable inquiry, for purposes of this representation, the Offeror represents that—

It \Box does, \Box does not use covered telecommunications equipment or services, or use any equipment, system, or service that uses covered telecommunications equipment or services. The Offeror shall provide the additional disclosure information required at paragraph (e)(2) of this section if the Offeror responds "does" in paragraph (d)(2) of this section.

(e) Disclosures.

(1) Disclosure for the representation in paragraph (d)(1) of this provision. If the Offeror has responded "will" in the representation in paragraph (d)(1) of this provision, the Offeror shall provide the following information as part of the offer:

(i) For covered equipment—

- (A) The entity that produced the covered telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the original equipment manufacturer (OEM) or a distributor, if known);
- (B) A description of all covered telecommunications equipment offered (include brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); and
- (C) Explanation of the proposed use of covered telecommunications equipment and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(1) of this provision.

(ii) For covered services—

- (A) If the service is related to item maintenance: A description of all covered telecommunications services offered (include on the item being maintained: Brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); or
- (B) If not associated with maintenance, the Product Service Code (PSC) of the service being provided; and explanation of the proposed use of covered telecommunications services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(1) of this provision.
- (2) Disclosure for the representation in paragraph (d)(2) of this provision. If the Offeror has responded "does" in the representation in paragraph (d)(2) of this provision, the Offeror shall provide the following information as part of the offer:

(i) For covered equipment—

- (A) The entity that produced the covered telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the OEM or a distributor, if known);
- (B) A description of all covered telecommunications equipment offered (include brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); and
- (C) Explanation of the proposed use of covered telecommunications equipment and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(2) of this provision.

(ii) For covered services—

- (A) If the service is related to item maintenance: A description of all covered telecommunications services offered (include on the item being maintained: Brand; model number, such as OEM number, manufacturer part number, or wholesaler number; and item description, as applicable); or
- (B) If not associated with maintenance, the PSC of the service being provided; and explanation of the proposed use of covered telecommunications services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b)(2) of this provision.

(End of provision)

52.204-25 Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

As prescribed in 4.2105(b), insert the following clause:

Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment (Aug 2020)

(a) Definitions. As used in this clause—

Backhaul means intermediate links between the core network, or backbone network, and the small subnetworks at the edge of the network (*e.g.*, connecting cell phones/towers to the core telephone network). Backhaul can be wireless (e.g., microwave) or wired (*e.g.*, fiber optic, coaxial cable, Ethernet).

Covered foreign country means The People's Republic of China.

Covered telecommunications equipment or services means—

- (1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities);
- (2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);
- (3) Telecommunications or video surveillance services provided by such entities or using such equipment; or

(4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Critical technology means-

- (1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;
- (2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled-
- (i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or
 - (ii) For reasons relating to regional stability or surreptitious listening;
- (3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);
- (4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);
- (5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or
- (6) Emerging and foundational technologies controlled pursuant to section 1758 of the Export Control Reform Act of 2018 (50 U.S.C. 4817).

Interconnection arrangements means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is ultimately delivered (e.g., connection of a customer of telephone provider A to a customer of telephone company B) or sharing data and other information resources.

Reasonable inquiry means an inquiry designed to uncover any information in the entity's possession about the identity of the producer or provider of covered telecommunications equipment or services used by the entity that excludes the need to include an internal or third-party audit.

Roaming means cellular communications services (e.g., voice, video, data) received from a visited network when unable to connect to the facilities of the home network either because signal coverage is too weak or because traffic is too high.

Substantial or essential component means any component necessary for the proper function or performance of a piece of equipment, system, or service.

(b) Prohibition.

- (1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. The Contractor is prohibited from providing to the Government any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104.
- (2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract, or extending or renewing a contract, with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract.
 - (c) Exceptions. This clause does not prohibit contractors from providing—
- (1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
- (2) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.
 - (d) Reporting requirement.
- (1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the Contractor is notified of such by a subcontractor at any tier or by any other source, the Contractor shall report the information in paragraph (d)(2) of this clause to the Contracting Officer, unless elsewhere in this contract are established procedures for reporting the information; in the case of the Department of Defense, the

Contractor shall report to the website at https://dibnet.dod.mil. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at https://dibnet.dod.mil.

- (2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause
- (i) Within one business day from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.
- (ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.
- (e) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (e) and excluding paragraph (b)(2), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial items.

(End of clause)

52.204-26 Covered Telecommunications Equipment or Services-Representation.

As prescribed in 4.2105(c), insert the following provision:

Covered Telecommunications Equipment or Services-Representation (Oct 2020)

- (a) *Definitions*. As used in this provision, "covered telecommunications equipment or services" and "reasonable inquiry" have the meaning provided in the clause 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.
- (b) *Procedures*. The Offeror shall review the list of excluded parties in the System for Award Management (SAM) (https://www.sam.gov) for entities excluded from receiving federal awards for "covered telecommunications equipment or services".

(c)

(1) Representation. The Offeror represents that it \Box does, \Box does not provide covered
telecommunications equipment or services as a part of its offered products or services to the
Government in the performance of any contract, subcontract, or other contractual instrument.

(2) After conducting a reasonable inquiry for purposes of this representation, the offeror
represents that it □ does, □ does not use covered telecommunications equipment or services, or
any equipment, system, or service that uses covered telecommunications equipment or services.

(End of provision)